THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Vulnerabilities of Supply Chains Post-Brexit

Executive Summary

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Preamble

Arla Foods UK has commissioned LSE Consulting's Trade Policy Hub to deliver a study on the vulnerabilities of the United Kingdom and European Union food industry supply chains after the end of the transition period on 31st December 2020.

This study provides a follow up to the report LSE Consulting delivered in July 2018 on the impact of Brexit on the dairy sector in the UK. The aim of that project was to conduct a critical analysis of the "realistic" scenario for Brexit and to consider the wider implications for product costs and availability in the dairy sector.

This report takes a broader look at the food and beverage sector rather than dairy specifically and considers a wider range of potential disruptions and mitigation measures in no deal and FTA scenarios.

Arla Foods UK has been an active contributor to policy discussions surrounding the potential impact brought about by UK's decision to withdraw from the European Union as well as the effect that Covid-19 has had on the food sector. Earlier this year, it commissioned research on "How to best protect shoppers during the Brexit transition". This report highlighted a few crucial points on what shoppers in the UK value most and the divergence between consumer expectations and the potential disruptions at the end of the transition period.

Our report shows that consumers in the UK are highly dependent on products originating in the EU where 40 percent of all consumption of food products in the UK comes from EU countries, suggesting that UK consumers are highly exposed to changes in the future trading relationship. We also expect that consumers in the EU may also notice increased prices and reduced availability of products from the UK, especially for products for which the UK is an important producer.

In order to be able to properly assess the consequences of higher trade barriers from Brexit on food products, we first document the linkages between the UK and the EU on the aggregate level before zooming into specific products and countries that are particularly vulnerable or important. To this end, we combine quantitative analysis of trade flows between the UK and the EU and forecast tariff and non-tariff measures in the two scenarios with qualitative assessment of the effects on the food and beverage labour market, and disruptions across four dimensions: price and availability of products; quality and food standards; local production; and other disruptions. The latter relies on literature review of existing studies and semi-structured interviews with stakeholders in the UK and the EU.

Our work shows that the food and beverage sector will be one of the worst affected by additional trade barriers and tariffs. Disruptions across the supply chains will be particularly severe in a no deal Brexit scenario due to high tariff rates. The effects are particularly striking vis-à-vis trade flows: both scenarios will result in reduced product availability of EU products, reduced traded volumes across the UK and the EU, and higher prices for all types of products (branded, unbranded, and specialty). The study also highlights the difference between the short-term impacts which operators (farmers, importers, logistic companies) are already risk managing as best as they can but there are no perfect solutions; versus long term effects which will alter substantially trade flows and supply chains. In both scenarios issue will remain, and there will be challenges with dealing with non-tariff barriers, customs, and system preparedness in any event.

As we look ahead to the end of the transition period, it is clear that a Free Trade Agreement (FTA) will go a long way to minimise disruption and the impact in the food sector and on consumers. However, even in the case of an FTA, significant barriers to trade will be imposed through non-tariff barriers which will still negatively affect the sector. But our report also shows that there are urgent and specific actions that both the UK and the EU need to take to ensure the industry is supported in the short and longer term.

Executive Summary

The Food supply chain in the UK and the EU

- Supply chains between the UK and the EU are closely interlinked with intermediary and final products and inputs, relying on tariff-free, barrier-free flow between the two parties.
- No deal Brexit will cause disruptions to supply chains both in the UK and the EU, transforming trade flows substantially in the long-term.
- 40% of agricultural and food products consumed by households and businesses in the UK are imported from the EU.
- The food manufacturing sector imports 9% and the agricultural sector 11% of its intermediate inputs from the EU.
- Over 15% of dairy inputs used in the UK food industry are imported and, of those, 99% come from the EU, highlighting that consumers will be affected by the future trading relationship.
- For certain products, the UK and the EU rely heavily on each other:
  - 85% of Danish and 53% of Dutch exports of certain meat products go to the UK.
  - The UK imports 69% of certain aluminium products, 65% of certain pharmaceutical goods and 51% of certain fertilizers from Germany, all of which are key inputs to the agriculture and food industry.
  - More than 75% of UK's imports of cut flowers, bulbs and related products come from the Netherlands, representing over £500 million of imports per year.

The Impact of Brexit on Trade Cost

- The impact of no deal Brexit will disproportionately affect the food and beverage sector, particularly fresh produce.
- While the potential tariffs represent the highest cost for operators from both the UK and the EU, the cost at the border and increased administrative and regulatory burden will significantly affect companies and as a result the consumer. Non-tariff barriers will apply whether there is a deal over tariffs or not.
- Estimates of the cost of compliance with rules of origin checks, when importing into the EU, are found to be in the range of 8% of the value of the underlying good, with a significant portion of this cost (85%) being a result of extra paperwork.
- Import declarations alone could cost traders from both the UK and EU approximately £4 billion a year.
- Chemicals – which are a crucial input to agriculture - face increased regulatory costs from Brexit. The cost of registering each chemical with the new UK regulator will be at a minimum £5,000, but can be in the hundreds of thousands of pounds for some chemicals, that require additional data access.
- The average tariff when exporting food and beverage products from the EU to the UK will rise from 0% to 17.7% when accounting for charges per weight, volume, and concentration and weighting by the value of imports of each product.

- The average tariff when exporting food and beverage products from the UK to the EU will rise from 0% to 21.7% when accounting for charges per weight, volume, and concentration and weighting by the value of imports of each product.

- The average tariff for the food and beverage sector in the UK is more than 4 times larger than all other sectors, while for EU tariffs it is more than 6 times larger. The difference is mainly due to additional charges on weight, volume and concentration which are far more prevalent in food industries and translate to large tariff rates.

The Impact on Trade, Prices and Product Availability

- The predicted changes in trade flows in this section refer to long-run changes and to changes in bilateral trade between the EU and the UK. Some of the reduction in trade between the UK and EU will be offset by increased trade with other countries and/or domestic production. Trade flows are expected to reduce much less in the short run as many businesses are expected to continue operating within existing supply chains for some time, absorbing the cost of tariff and non-tariff barriers.

- The predicted changes in price discussed in this section refer to changes in prices only of those specific products bilaterally traded between the UK and EU. Price increases however are expected to materialise in the short run.

- Operators have begun increasing stock in preparation for a no deal Brexit but the timing of the end of the transition period, which coincides with the Christmas peak period, will strengthen the negative impact of the introduction of tariffs. The lack of clarity of the Border Operating Model and the absence of functioning Good Vehicle Management System and Smart Freight Software further amplify the disruption in both scenarios.

- While consumers expect that local production will be readily available to replace imported items, stakeholders highlight the inability of current producers to cope with increased volume demand.

- Similarly, EU producers are considering options for moving production to the UK to avoid tariffs, but in many cases increasing capacity of current facilities is not possible and greenfield investment takes 2-3 years' time at the least as well as substantial investment. Thus, it cannot be a solution for short term disruptions. These measures are being considered especially in a no deal scenario, where long-term production will be moving out of the EU.

- Under a no deal scenario 17% of product categories in the food and beverage sector will stop being exported entirely from the EU to the UK, and 20% will stop being exported from the UK to the EU. For 85% of products, the volume of trade will fall.

- The average reduction in UK food exports to the EU is 63.2% in a no deal scenario and 22.5% under a Free Trade Agreement. The average reduction in EU food exports to the UK is 61.7% in a no deal scenario and 22.6% under a Free Trade Agreement.

- Dairy exports from the EU to the UK are estimated to fall by 18% under a Free Trade Agreement and by 94% under a no deal scenario. Under a no deal scenario a number of product lines including yoghurt, buttermilk, dairy spreads, milk and cream are likely to cease being imported into the UK from the EU. Stakeholders highlighted that in the case of a no deal scenario there will be an immediate impact on butter, spreadable cheese and mozzarella for pizza.

- Spain, Netherlands, Belgium, Denmark, France, Italy and Greece are all estimated to see a fall in food exports of over 5% in a no deal scenario, while Cyprus is estimated to see a fall of approximately 16%, holding other factors constant. Ireland is likely to be most negatively affected, but modelling the changes is made difficult by the complexity of the Withdrawal Agreement on Northern Ireland given the interconnectedness between Ireland and Northern Ireland. At the time of writing, this is made more complicated by UK Government policy relating to the Withdrawal Agreement.

- Consumers will feel the effect of price increases across all types of products:
  - In the UK, the average price increase for branded and speciality products imported from the EU under an FTA is estimated to be 9.9% and to be 26.5% under a no deal.
  - In the UK, the average price increase for unbranded and more substitutable products imported from the EU under an FTA is estimated to be 4.7% and under a no deal to be 12.5%.
  - In the EU, the average price increase for branded and speciality products imported from the UK under an FTA is estimated to be 8.5% and under a no deal to be 27.9%.
  - In the EU, the average price increase for unbranded and more substitutable products imported from the UK under an FTA is estimated to be 4.0% and under a no deal to be 13.2%.
- In the UK, speciality cheeses like Halloumi, Gorgonzola, Feta and Roquefort are estimated to experience price increases of 55% under a no deal scenario.
- Speciality prosciutto and bratwurst could see increases of 31% in the UK.
- Estimates driven by NTBs should be seen as a lower bound given the difficulty of modelling an increase in trade barriers that is historically unique. Uncertainties surrounding the impact of port waiting times, checks on POAO, firms navigating the new border system & Rules of Origin, and the smooth running of the new declaration system could lead to far higher costs than those modelled in this analysis. Thus, even in the event of a “shallow” FTA primarily focused on tariff reduction, significant impacts on trade and prices can still be expected.

Brexit and the Food and Beverage Labour Market

- The end of the transition period will signify significant disruption in labour availability in the food and beverage sector, which is highly reliant on EU migrants, particularly on the produce side (fruits and vegetables).
- Current estimates suggest that net migration from the EU to the UK has fallen by more than 50% since 2016.
- Approximately 25% of workers in the manufacture of food products industry are from the EU, compared to 7% on average, which makes it the sector most reliant on workers from the EU.
- The majority of EU workers in the food and beverage industry are low skilled and unlikely to meet the earnings requirements of the new points-based immigration system.
- Warehousing and support for transport is the second most exposed industry with a share of approximately 19% and is an important downstream industry for the distribution of food and beverages.
- The adverse effects due to the reduction in migration on the food supply chain are likely to be muted initially due to the current state of the labour market following the COVID pandemic.

Policy recommendation

- **Tariffs** present the highest potential cost for operators and tariff-free trade is crucial to avoid the most negative effects of Brexit on the food supply chain and consumer choice.
- **Tariffs** are very high on average in the food and beverage sector. Tariff-free trade between the UK and EU must be maintained which, due to World Trade Organisation rules, is only possible if a trade agreement is secured. A no deal Brexit would be devastating for the UK food sector: it would leave the UK with a decision of whether to either (i) maintain high tariffs at the expense of consumers facing significantly increased prices or (ii) reduce tariffs and expose UK producers to intense competition from all across the world which is likely to significantly undermine the UK food and drink industry.
- Vis-à-vis **custom procedures and non-tariff barriers**, the key recommendation is for full recognition of food safety systems and veterinary certifications and avoiding the creation of new non-tariff trade barriers in customs and border requirements, as well as confirming Great Britain's SPS regime as soon as possible. A no deal Brexit must be avoided, but in both the no deal and Brexit scenarios the following recommendations could alleviate some of the disruption in the sector. These will need to apply to all countries with which the UK trades on MFN terms:
    - Clarifying the UK's Border Operating Model and providing clear guidelines on the eligibility and procedure for simpler customs clearance and payment of customs duty.
    - Possibility for phasing-in further the custom clearance and customs duty requirements after 30 June 2021 due to the lack of preparedness for border checks.
    - Ensuring that the Goods Vehicles Management System and Smart Freight Service are tested and functional before the end of the year.
- In the food and beverage sector, the end of the transition period coincides with the **Christmas peak season**, which increases the risks of shortages due to depleted stocks.
    - Scheme for support towards increasing stock since Christmas is peak time and stocks run low.
    - Considering modifications to the UK's Border Operating Model to preview a longer phase-in period for pre-notifications and customs checks on perishable goods.
- The COVID-19 crisis highlighted that one of the main disruptions to supply chains is **panic-buying.** Policymakers should consider the introduction of:
    - Communication campaigns around the availability of products;
    - Ensuring systems in place to avoid panic buying;
    - Discussions with retailers based on experience with the pandemic .

Due to the **effect on the labour market**, certain F&B low skilled occupations such as Food and Drink Process Operatives (SOC10: 8111), Packers, Bottlers, Canners and Fillers (SOC10: 9134) and Farm Workers (SOC10: 9111), should be included on the shortage occupation list, with an annual salary in line with the Living Wage Foundations' recommended hourly rate.